

Title (en)

ADDITIVE MANUFACTURING METHOD AND APPARATUS

Title (de)

VERFAHREN UND VORRICHTUNG ZUR GENERATIVEN FERTIGUNG

Title (fr)

PROCÉDÉ ET APPAREIL DE FABRICATION ADDITIVE

Publication

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Application

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Abstract (en)

[origin: WO2017087546A1] An additive manufacturing method and apparatus is described for the printing of three-dimensional (3D) objects. The approach is based on a composite-based additive manufacturing process, except it uses commercial printing methods to achieve even higher speed and throughput. By using the invention, a prototyping and/or production process may be completed in hours rather than months, and the risks and problems of molds is eliminated. There is substantial improvement in the number and type of geometries that can be produced compared to injection molding, and the range of materials is enlarged as are the material properties. The method involves printing a substrate having at least one sheet using a printing technology, and stacking or folding the at least one sheet to form multiple layers consistent with that formed by a 3D model. The printing step is done using a printing technology such as flexography, lithography, offset, gravure, waterless printing, and silkscreen.

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